SUMMARY

Thes is for the qualification of "Master" specialty 8.05050301 "tools and systems" on "Research clamping workpieces elements with adaptation to the development drive clip lathe."

The object of the research thesis is solid models synthesized adaptive clamping elements.

The study examined the stress strain state is synthesized adaptive clamping elements

The aim is to develop constructive schemes clamping elements for machine lathe chucks, which are in the process of clamping surfaces adapted to the geometry of the workpiece clamping specified range of diameters, as well as studies using CAD / CAE-systems of their impact on the workpiece in the contact with the clamp.

In the thesis work:

- analysis forming machining surfaces and a choice of rational schemes of treatment;
- The complex technological calculations;
- designing structures made of machine equipment and its individual components;
- A 3-D model of the spindle unit investigated VAT adaptive cam;
- reasonably cost-effectiveness of the decisions;
- reasonably developed technical solutions according to the requirements of labor protection, life safety and ecology.